

Remarks

Reconsideration of the above-identified patent application is respectfully requested. Claims 1-95 are pending in this application. On October 31, 2008, the Examiner rejected claims 1-9, 18, 25-27, 51-62, and 71-77 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,181,992 to Gurne et al. (Gurne) in view of U.S. Patent No. 6,925,368 to Funkhouser et al. (Funkhouser). The Examiner also rejected claims 10-17, 19-24, 28-50, 63-70, and 78-95 under 35 U.S.C. § 103(a) as being unpatentable over Gurne in view of Funkhouser and in further view of U.S. Patent No. 6,430,485 to Hullinger (Hullinger), at that time. On February 2, 2009, the Applicants responded to these rejections by amending the claims and pointing out claimed elements that were not disclosed by the Examiner's cited references. Nevertheless, on April 15, 2009, the Examiner responded with a Final Office Action containing the same rejections based upon the same references and stating that "Applicant's arguments have been fully considered but are moot in view of the new grounds of rejection." These rejections, however, are based on the Examiner's improper characterization of the Gurne reference as disclosing both a first and a second interface for operatively coupling to distinct network segments of a vehicle communications network when, in fact, Gurne discloses only a single vehicle interface as part of its handheld tool.

The rejection of claim 1 under 35 U.S.C. § 103(a) based upon the Gurne and Funkhouser references is fundamentally improper because the Examiner has failed to correctly perform the factual inquiries required under *Graham v. John Deere Co.*, 383 U.S. 1 (1966). In *KSR Int'l. Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007), the United States Supreme Court clarified the test for obviousness. This decision has been

codified for use by patent examiners throughout MPEP 2100. The Supreme Court in *KSR* reaffirmed that certain principles govern the analysis of obviousness, including the reaffirmation that the question of obviousness must be resolved on the basis of the factual inquiries identified in its *Graham* decision. The first of such factual inquiries is a determination of the scope and content of the prior art. The Examiner has not properly evaluated the scope and content of the Gurne reference.

Independent claim 1 recites "a first interface configured for operatively coupling to a first network segment of the vehicle communications network, . . . a second interface configured for operatively coupling to a second network segment of the vehicle communications network, . . . and a third interface including a universal serial bus (USB) controller . . . configured for operatively coupling to the remote computer." The first network segment of the vehicle is "configured for communications according to a first protocol," while the second network segment is "configured for communications according to a second protocol." The Examiner asserts that Gurne teaches an adapter including both first and second interfaces, each configured for operatively coupling to a network segment of a vehicle communications network, reasoning that the "scanner connects to [the] vehicle using a plurality of cables and associated protocols." Office Action dated Apr. 15, 2009, p. 2-3 (citing Gurne, col. 3, lines 44-62; col. 4, lines 24-64). Contrary to the Examiner's assertions, however, the Gurne reference does not teach an adapter with multiple vehicle interfaces but rather teaches a handheld tool having only a single vehicle interface.

Gurne discloses a hand held unit 10 which connects to a car 12 via a vehicle interface cable 16 and also connects to a master station 14 via a general purpose

interface bus (GPIB) cable 18. (Gurne, FIG. 1; col. 3, lines 43-46.) The hand held unit 10 of Gurne includes three interfaces: a 36-way vehicle interface connection 42, a GPIB master station interface connection 44, and an RS-232 serial connection 40 for "communicating with other computers and computer peripherals." (Gurne, FIG. 3; col. 4, lines 29-45.) The hand held unit 10 also includes connection points 32-38 for digital multi-meter probes and a peripheral expansion port 48. (Id.) While Gurne teaches that "the vehicle interface [42] is adapted to work with a variety of interface cables [16]" to support communications protocols for different types of vehicles, Gurne also clearly states that the cables are interchangeably connected to the same interface:

Because the same connector interface 42 is used to support all of these various communication protocols, the hand held tool 10 must be able to recognize which cable is connected at the interface 42 and adapt its communication protocol accordingly. In this embodiment, this is accomplished by ensuring each of the unique cables has a unique resistance associated therewith. . . . Once the hand held tool 10 determines which vehicle interface cable 16 is connected to it, the hand held tool 10 adapts its communication protocol to match the protocol of the cable. This feature allows the hand held tool to be used with a wide variety of vehicles and vehicle controller systems, such as engine, transmission, anti-lock brake and body controllers.

(Gurne, col. 4, line 41 to col. 5, line 27 (emphasis added).) Thus, the vehicle interface 42 of Gurne only allows for one cable 16, which operates according to one protocol, to be connected at any given time. Thus, contrary to the Examiner's mischaracterization of Gurne, the vehicle interface 42 represents only a single vehicle interface. Nowhere does Gurne disclose "a second interface configured for operatively coupling to a second network segment of the vehicle communications network;" rather, the GPIB interface 44 and RS-232 interface 40 of Gurne are used only to communicate with computer systems remote from the vehicle. (See, e.g., Gurne, col. 12, lines 34-35.)

For at least this reason, the Examiner has failed to properly evaluate the scope and content of the Gurne reference. Moreover, this deficiency of Gurne is not remedied in the Funkhouser reference which also fails to teach an adapter including “a first interface configured for operatively coupling to a first network segment” and “a second interface configured for operatively coupling to a second network segment” of a vehicle. Funkhouser discloses a data acquisition and transfer (DAT) device 12 which includes a first data link 14 which connects to the OBD II port 16 of a vehicle 18 and a second data link 22 (preferably USB) which connects to a personal computer 26. (Funkhouser, FIGS. 1-2; col. 6, lines 8-17; col. 8, lines 35-63.) The DAT device 12 of Funkhouser may optionally have a third interface, such as an infrared link, a Bluetooth link, or a modem, but these interfaces are each for communicating with a remote system, not the vehicle 18. (Funkhouser, col. 16, lines 10-31.) As neither Gurne nor Funkhouser discloses or suggests the limitations of claim 1, the combination cannot support a *prima facie* case of obviousness under 35 U.S.C. § 103(a), and withdrawal of this rejection is therefore respectfully requested.

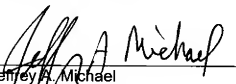
Applicants further note that Hullinger likewise fails to show or disclose the adapter of claim 1. The device of Hullinger, wireless network node 40A, is connected to the serial data bus 18 of vehicle 13 at a single diagnostic port 36 by a single J1939 compatible cable 39. (Hullinger, FIGS. 1-2; col. 3, lines 37-59; col. 4, lines 25-26.) Hullinger does teach connection via the RS-485 or UART ports of vehicle control system 10 as an alternative to the J1939 port (col. 5, lines 23-35); but nowhere teaches an adapter having both “a first interface configured for operatively coupling to a first network segment” and “a second interface configured for operatively coupling to a

second network segment" of a vehicle. Thus, neither Gurne, Funkhouser, nor Hullinger, alone or in combination, show, disclose, teach or suggest providing an adapter with a two interfaces, each configured for operatively coupling to a network segment of a vehicle communications network, as recited by Applicants' claim. For at least this reason, the rejection of claim 1 should be withdrawn.

Independent claims 28, 36, 44, 51, 56, and 78 each recite a first interface and a second interface configured for operatively coupling to two vehicle networks or network segments and a third interface configured for operatively coupling to a remote computer. For the same reasons stated above with respect to claim 1, the prior art references relied upon by the examiner, independently or in combination, do not disclose or suggest all of the limitations of these claims. Claims 2-27, 37-43, 52-55, 57-77, and 79-95 each depend from one of these independent claims, and therefore include those limitations. For at least the reasons stated above, the § 103(a) rejections of claims 2-95 therefore should also be withdrawn.

Claims 1-95 are believed to be in condition for allowance, and such action is solicited. The Examiner is cordially invited to contact the undersigned by telephone to discuss any unresolved matters.

Respectfully submitted,



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